

### **REASONS FOR ALLOWANCE**

The following is an examiner's statement of reasons for allowance: Kim (US 6,528,062 B1) teaches preparing aquarium water with the extract from yellow soil (column 3, line 64), but does not disclose or suggest that the extract contains germanium or the method of extraction as claimed. The Journal of Applied Chemistry article by Powell et al teaches the extraction and refining of germanium from flue dust and germanite using smelting, dissolution in ferric solution, distillation and rectification (abstract), but does not disclose or suggest extracting germanium from yellow soil by drying, heating, dipping and filtering as claimed. Greenwood et al teaches recovering germanium from coal ash and flue dusts of smelters processing zinc ores (page 368). Recovery from flue dusts involves sulfuric acid leaching, addition of NaOH, precipitation, heating with HCl/Cl<sub>2</sub> and hydrolysis (page 369). However, Greenwood et al does not disclose or suggest extracting germanium from yellow soil by drying, heating, dipping and filtering as claimed. JP 58001031 teaches recovering pure germanium and germanium-containing rock in high yields by treating the finely ground germanium rock with acids and alkalis, removing silicic acids and metallic hydroxides, subjecting the filtrate thereof to an ion exchange treatment then eluting germanium with an NaOH solution (abstract). However, JP '031 does not disclose or suggest extracting germanium from yellow soil by drying, heating, dipping and filtering as claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMA M. MCGUTHRY-BANKS whose telephone number is (571)272-2744. The examiner can normally be reached on M-F 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Roy King/  
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1793

/T. M. M./  
Examiner, Art Unit 1793  
14 April 2008